

# engineering data

## D-125E CARDIOID DYNAMIC MICROPHONE

## DESCRIPTION

EIA G<sub>m</sub>:

Tolerance:

High-Z output w/MCH-

Sound Pressure Level for 1% THD: 40 Hz, 1000 Hz, 5000 Hz: 128 dB

Hum Sensitivity: -142 dBm (1 mG field)

Unquestionably one of the best values among today's generalpurpose cardioids, the AKG D-125E is a uniquely versatile speech and music microphone with an outstanding price/ performance ratio - an instrument with the audio quality, directionality and ruggedness demanded by the professional, but one well within reach of the amateur and semiprofessional budget. Engineered to meet the needs of newsfilm/ENG crews, sound-reinforcement contractors, recordists and pop/ rock musicians, the D-125E features contoured frequency response and uniform polar response coupled with shockproof construction, ease of field service and attractive styling. Thus - to the seasoned veteran and skilled novice alike - the D-125E offers the uncompromisingly professional look, feel and sound that are AKG's traditional hallmarks.

With its variable bass-versus-distance contour (marked bass emphasis or "proximity effect" when used close up; progressively diminishing bass response when used farther away), the D-125E is a creative tool that gives its users personal control over the tonal "shading" of voices or instruments to suit any locale, or any musical mood and style. Even at the extremely close working distances favored by many reporters and vocalists, the microphone's foam-lined windscreen and high sound-pressure-level capability assure clean reproduction - with a minimum of breath "pop" and with complete freedom from harshness or overload.

-146 dBm

±2.5 dB

20T, -20TS (optional): -44.5 dBV at 1 Pa\*

Case Material: Nickel-plated zinc alloy; steel-wire mesh



Moreover, the D-125E's cardioid directional pattern is unusually uniform for a microphone in its price class. This uniformity - extremely important for newsgathering or recording, and utterly indispensible for sound reinforcement - produces negligible coloration of desired sounds at the sides of the microphone while providing exceptional suppression of unwanted acoustic feedback and noise towards the rear of the microphone.

SA-26 clothespin stand adapter with 5/8-in. -27 thread

KM-series floor and boom stands, stand accessories

MCH-series heavy-duty microphone cable assemblies

W-31 foam windscreen (in red, green, blue, yellow or gray) GN-7E, GN-14E, GN-20E modular flexible-gooseneck kits

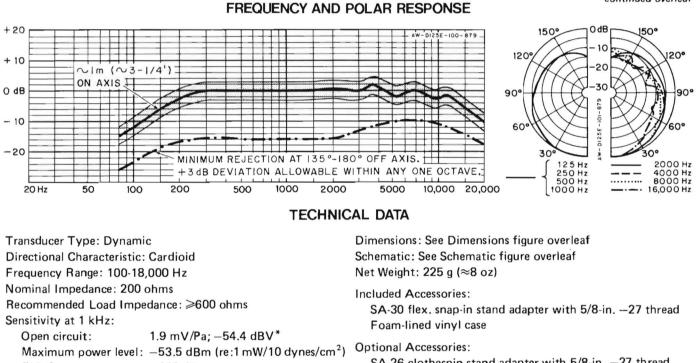
MSH-58E 8-in. flexible gooseneck w/female XLR-type conn.



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D-125E



\*1 Pa (Pascal) = 10  $\mu$ b = 10 dynes/cm<sup>2</sup>  $\approx$  94 dB SPL

PF-10 pop filter

ST-series table stands

Cushioned within a compliant impact-absorbing suspension, the D-125E's transducer element is relatively insensitive to handling noise, mechanical shocks and spurious vibrations. As a further precaution, the transducer incorporates a humbucking winding to cancel the effects of stray magnetic fields. The microphone's rugged reinforced-wire-mesh windscreen and impact-resistant zinc-alloy case encapsulate all internal parts against metal particles and dust. Should field service

### ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The microphone shall be a dynamic moving-coil type with a frequency range of 100-18,000 Hz. It shall have a cardioid directional pattern. The front-to-rear discrimination shall exceed 16 dB at 1000 Hz at a sound-incidence angle of 135-180 degrees, and an effective cardioid pattern shall be maintained over the entire frequency range.

The microphone shall have a nominal impedance of 200 ohms. The output level shall be -53.5 dBm (re: 1 mW/10 dynes/cm<sup>2</sup>), and the microphone shall be capable of handling a maximum sound-pressure level of 50 Pa (128 dB SPL) at 1000 Hz with distortion not exceeding 1%. The EIA sensitivity rating (G<sub>m</sub>) shall be -146 dBm.

An integral wire-mesh windscreen – lined with polyurethane foam, reinforced by special internal struts, and commensurate with the acoustical properties of the unit – shall protect the microphone system from metal particles and dust. To facilitate field service, the windscreen shall be screw-threaded and removable. The transducer element shall

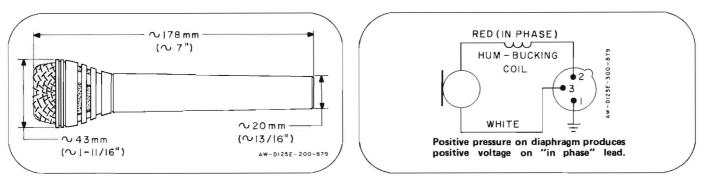
#### DIMENSIONS

be elastically suspended to isolate the element from the effects of handling noise, mechanical shocks, and spurious vibrations, and shall incorporate a hum-bucking winding to cancel the effects of stray magnetic fields. The transducer diaphragm material shall be nonmetallic MAKROFOL.

The microphone shall incorporate a 3-pin male audio connector designed to mate with Cannon XLR, Switchcraft A3, or equivalent connectors. An AKG model SA-30 swivel stand adapter with standard 5/8-in, -27 thread, and a foam-lined vinyl carrying case shall also be provided. The finish of the microphone shall be matte nickel and shall not create specular light reflections.

The microphone shall be 178 mm ( $\approx$ 7 in.) long by 43 mm ( $\approx$ 1-11/16 in.) in maximum diameter by 20 mm ( $\approx$ 13/16 in.) in minimum diameter, and the net weight shall not exceed 225 g ( $\approx$ 8 oz). The microphone herein specified shall be the AKG D-125E.

#### SCHEMATIC



### OPTIONAL AKG HEAVY-DUTY SHIELDED CABLE ASSEMBLIES FOR THIS MICROPHONE

**NOTE:** All cable assemblies except the MCH-50 are 6.1 m ( $\approx$ 20 ft) long. All are available in black. Model numbers with an asterisk (\*) are also available in red, green, and blue – please specify cable-color choice in such cases.

MCH-20\* Low-impedance cable assembly w/o switch (female XLR-type connector to male XLR-type connector)
MCH-20F Low-impedance cable assembly w/o switch (female XLR-type connector to stripped-and-tinned ends)
MCH-20P Low-impedance cable assembly w/o switch (female XLR-type connector to phone plug)
MCH-20S Low-impedance cable assembly w/switch (female XLR-type connector to male XLR-type connector)
MCH-20T High-impedance cable assembly w/o switch (female XLR-type connector to transformer w/phone plug)
MCH-20TS\* High-impedance cable assembly w/switch (female XLR-type connector to transformer w/phone plug)
MCH-20TS\* High-impedance cable assembly w/switch (female XLR-type connector to transformer w/phone plug)
MCH-50\* Low-impedance 15.2 m (≈50 ft) cable assembly (female XLR-type connector to male XLR-type connector)



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ever become necessary, the transducer can be reached simply by unscrewing the windscreen.

The D-125E is a low-impedance balanced-output unit fitted with a standard 3-pin male XLR-type connector. The microphone is supplied complete with an SA-30 stand adapter and a foam-lined vinyl protective case. Several optional acessories – listed in the Technical Data section – are available.